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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,198	01/29/2001	Toshifumi Takaoka	107853	6872

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EXAMINER

GONZALEZ, JULIO C

ART UNIT PAPER NUMBER

2834

DATE MAILED: 04/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/770,198

Applicant(s)

TAKAOKA ET AL.

Examiner

Julio C. Gonzalez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Power output apparatus using different torque and speed pattern characteristics and control method thereof.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the pattern storing unit, pattern selecting unit as disclosed in claim 1 and the power demand receiving unit as disclosed in claim 2 and the pattern selection output unit as disclosed in claim 7 and the command generating unit as disclosed in claim 8 and the state determining unit as disclosed in claim 9 and the result output unit as disclosed in claim 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, what is the pattern storing unit storing? What are the output characteristics patterns? Are the characteristics data? Is it storing voltage in a battery? What certain patterns have to follow? What characteristics? How is the power is related to the pattern? How is it possible to generate power to the drive shaft?

In claim 2, what is the power demand? Is it a certain power level (e.g. voltage, watts)? How the power demand receiving unit receives power demand? Who and what is demanding power? The power demand receiving unit or the operator? Is the power demand receiving unit the operator? How the power received is generated to the drive shaft?

In claim 5, what is considered a "high energy efficiency? To what reference value is the high efficiency been compared to?

In claim 6, how the different patterns are chosen? How the system is able to switch from one pattern to another? Is the pattern storing unit a RAM memory, which stores data and commands for a computer program? Is the pattern storing unit computer program commands?

In claim 7, how the output unit outputs an output characteristic pattern? How and what determines the pattern selected by the pattern selecting unit?

In claim 8, the electric motor is disclosed to be used with driving characteristics that exceeds a rated value of the driving characteristics of the electric motor?

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Is the motor been used beyond its rated capabilities? What are the rated values of the electric motor? What are the driving characteristics of the electric motor?

Also, what is the predetermined output been added to the selected output characteristic pattern?

What is meant by "control driving of the electric motor with the driving characteristic that exceeds the rated value for a limited period of time? What is been controlled, the electric motor? The driving characteristics? The power output apparatus? For how long is the control been done?

In claim 9, what state of the electric motor determines that the electric motor can be used beyond its rated value? What is meant by the "rated value"?

In claim 10, is the result output unit always outputting a result that the state determining unit chooses? What are these results been outputted? Can these results be measured? Do the results have units of measurements (e.g. volts, amps, rpm, power)?

Are the results been done by a computer program?

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5, 8, 11, 12 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takaoka et al in view of Kiuchi et al.

Takaoka et al discloses a power apparatus using a motor for outputting power to a drive shaft (see claim 14), a combustion engine 20, a controller 80 having storing units, an input and output unit (see figure 3). Also, many other pattern characteristics are store in the system (column 36, lines 28-33).

However, Takaoka et al does not disclose that a controller controls the electric motor and the engine.

On the other hand, Kiuchi et al discloses for the purpose of improving the emission and control capabilities of the combustion engine, an engine controller 17 and a motor controller 5 (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a power apparatus as disclosed by Takaoka and to modify the invention by controlling the engine and the motor discloses for the purpose of improving the emission and control capabilities of the combustion engine as disclosed by Kiuchi et al.

7. Claims ~~6, 7, 9, 10, 13~~ and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takaoka and Kiuchi as applied to claims 1, 8 and 12 above, and further in view of Ibamoto et al.

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The combined power apparatus discloses all of the limitations above. However, the combined power apparatus does not disclose functioning at different torque levels and speeds.

On the other hand, Ibamoto et al discloses for the purpose of reducing the manufacture cost of automobiles increase the performance of the transmission that the output torque can be adjusted to the need of the vehicle (see abstract & claims 1, 2b, 2c).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined power apparatus as disclosed above and to modify the invention by using a system that uses different speeds and torque outputs for the purpose of reducing the manufacture cost of automobiles increase the performance of the transmission as disclosed by Ibamoto et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-1341 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jcg

April 20, 2002


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